

ART. II.—*Monographia Chalciditum.* By FRANCIS  
WALKER, ESQ. F.L.S.

(Continued from Vol. I. page 466.)

“ ——— the green myriads in the peopled grass.”

*Family.*—LEUCOPSIDÆ.

GENUS LEUCOPSIS,<sup>a</sup> *Fabricius.*

Vespa . . *Swammerdam, Sulzer, Christ.*

Cynips . . *De la Tourette, Gmelin.*

Leucopsis. *Fabricius, Gmelin, Latreille, Olivier, Villers,  
Rossi, Cuvier, Panzer, Jurine, Walckenaer,  
Illiger, Spinola, Fuessly, Dalman, Klug,  
Fonscolombe.*

Leucopsis. *Lamarck, Dumeril.*

Corpus punctatum, supra pubescens: caput mediocre, transversum, thorace vix angustius, anticè ubi scapi insident excavatum: oculi mediocres: ocelli 3, supra verticem trigonè dispositi: antennæ *maris et fem.* similes, medio frontis insertæ, 14-articulatæ, clavatæ, pubescentes; scapus in canaliculo frontali receptus; flagellum subincurvum; articulus 1<sup>us</sup>. *s.* scapus elongatus; 2<sup>us</sup>. brevis, cyathiformis; 3<sup>us</sup>. elongato-cyathiformis; 4<sup>us</sup>. et 7 sequentes ferè lineares, latiores, breviores; 12<sup>us</sup>. mediocris, apice angustior; 13<sup>us</sup>. et 14<sup>us</sup>. minimi, vix conspicui: labrum breve, transversum, anticè impressum: mandibulæ ferè rectæ, æquales, bidentatæ; dentes obtusi; internus brevis, latus, ferè geminus: maxillæ elongatæ, graciles, apice acuminatæ, externè pilosæ, internè apicem versus in lobum productæ bipartitum tenuem mollem ciliatum: palpi 4-articulati, filiformes; articulus 1<sup>us</sup>. elongato-cyathiformis; 2<sup>us</sup>. longior; 3<sup>us</sup>. 2<sup>o</sup>. brevior; 4<sup>us</sup>. 2<sup>o</sup>. longior: mentum elongatum, angustum, apice trispinosum: palpi 3-articulati, ferè filiformes, menti apicem versus inserti; articuli subclavati, 2<sup>us</sup>. 1<sup>o</sup>. brevior, 3<sup>us</sup>. longior: labium ferè cordiforme, molle; anguli antici producti; margo anticus ciliatus, medio impressus: thorax ovatus: prothoracis scutellum maximum, subquadratum, anticè paullò angustius; segmenta reliqua dorsalia supra occulta; pectus parvum: mesothoracis scutum maximum;

<sup>a</sup> Λευκός albus, ὄψις facies. I think, with Dumeril, that the name of the genus is derived from these words.

parapsides scuto in unum confusæ; scutellum magnum, semicirculus; paraptera et epimera trigona; sternum magnum, medio canaliculatum: metathoracis scutellum parvum, plerumque apice bispinosum; postscutellum maximum; epimera et paraptera trigona; sternum magnum: propedes<sup>b</sup> graciles; coxæ trigonæ, mediocres; trochanteres parvi; tibiæ paullò arcuatæ, apice latiores, et dentibus nonnullis minutis et spina elongata valida subarcuata armatæ: mesopedes longiores, graciliores; tibiæ rectæ, femoribus paullò longiores, externè basim versus impressæ; spina apicalis brevior, tenuior; cæteri propedum: metapedum coxæ maximæ, angulus internus serratus; femora maxima, ovata, externè convexa, internè plana, subtus dentibus plurimis armata; tibiæ valdè arcuatæ, subtus canaliculatæ, femoribus appressæ, apicis angulus internus productus, acuminatus; cæteri propedum: tarsi omnes subtus ciliati, articulus 1<sup>us</sup>. elongatus, sequentes longitudine decrescentes, ultimus 2<sup>o</sup>. longior; unguis arcuati, subtus basi dentibus plurimus minutis armati; pulvilli minimi: proalæ plicatæ; nervus subcostalis costam alæ medium versus attingens, et inde ferè ad apicem productus, ubi costam attingit ramulum emittens furcatum; furca antica mox abrupta; postica alæ apicem versus producta; nervus in alæ disco, brevis, insulatus; nervus 3<sup>us</sup>. longitudinalis alæ basi proveniens, medio crassior, apicem versus furcatus; furcæ ambæ marginem posticum attingentes; nervus 4<sup>us</sup>. marginis postici medium occupans; areolæ paucæ, apertæ, non benè determinatæ: metalæ parvæ; nervus subcostalis a basi, ubi costa jungitur, ferè ad alæ apicem productus; nervi duo longitudinales indistincti; hamus nervo subcostali ante alæ apicem insertus: abdomen sessile, elongato-ovatum, compressum, apice rotundum; *maris*, segmentum 1<sup>um</sup>. magnum; 2<sup>um</sup>. maximum, ferè omne abdominis dorsum occupans; 3<sup>um</sup>. minimum, vix conspicuum; subtus abdomen segmenta 5 ventralia conspicua, subæqualia: *fem.* abdomen dorso ubi oviductus insidet canaliculatum; segmentum 1<sup>um</sup>. maximum; 2<sup>um</sup>. minimum, 1<sup>o</sup>. ferè occultum; 3<sup>um</sup>. mediocre; 4<sup>um</sup>. majus, latera latiora; 5<sup>um</sup>. parvum; 6<sup>um</sup>. maximum, 5<sup>i</sup>. dorso recurvum, subtus quoque recurvum; subtus abdomen lamina elongata, angusta, carinata, segmenta omnia ventralia occultat: oviductus segmenti 6<sup>i</sup>. apice emersus, dorso recurvus.

These insects, in the larva state, are parasitic upon the

<sup>b</sup> I have adopted this and similar terms, from Mr. Newman's letter on Osteology, published in Vol. I. p. 400.

mason-bees and wasps. The trophi, particularly the lingua and maxillæ, are more developed than in most *Chalcidites*.

DIVISIO I. *Metafemora subtus dentibus 8 armata.*

Sp. 1. *Leuc. grandis*.

*Leucospis gigas* . . *Rossi Faun. Etrusc. ed. Illiger. II.*  
130; *Fonsc. Ann. Sci. Nat.* 26. 273.

*Leucospis gallica* . . *Rossi Mant.* 135. 298.

*Leucospis dorsigera*. Var. *Hochemwarth Schrift. Berl. Ges.*  
VI. 341. Taf. 8. fig. 1, 2; *Christ.*  
*Bienen.* 225. Tab. 19. fig. 9.

*Leucospis grandis* . *Klug. Act. Nat. Cur. Berl.* VI. 66. 1.

Sp. 2. *Leuc. gigas*. Mas et fem. *Nigra, flava variegata,*  
*prothoracis scutello flavo marginato, mesoscuti dorso*  
*bimaculato, oviductu abdominis basim non attingente.*

*Cynips nigra, &c.* . . *De la Tourette Acad. des Sci.* 9. 730.  
fig. 1—5.

*Cynips lugdunæa* . . *Gmel.* 1. 5. 2653. 26.

*Sphex dorsigera* . . *Sulzer. Gesch.* 196. Tab. 27. fig. 11.

*Leucospis dorsigera*. *Fabr. Syst. Ent.* 361. 1; *Spec. Ins.*  
1. 457. 1; *Mant. Ins.* 1. 284. 1;  
*Gmel.* 2739. 1; *Oliv. Encyclop.*  
*Hist. Nat. Ins.* VII. 352. 1. Pl. 100.  
fig. 8. 9; *Fuessly Archiv.* 2. Tab.  
18. 51. fig. 1—10.

*Leucospis gallica* . . *De Villers Ent.* III. 261. Tab. 8.  
fig. 18.

*Leucospis gigas* . . . *Fabr. Ent. Syst.* II. 245. 1; *Syst.*  
*Piezat.* 168. 1; *Panz. Faun. Ins.*  
*Germ.* 84. Tab. 17. 18.; *Coqueb.*  
*Illustr. Icon.* I. 23. Tab. 6. fig. 1.;  
*Spin. Ins. Lig. fascic.* 1. 63.; *Latr.*  
*Hist. Nat. des Ins.* XIII. 219. 2.;  
*Gen. Crust. et Insect.* IV. 24.; *Règne*  
*Anim.* III. 475.; *Nouv. Edit.* V.  
296.; *Nouv. Dict. d'Hist. Nat.* XVII.  
514.; *Klug. Act. Nat. Cur. Berl.*  
VI. 66. 2.

*Leucopsis gigas*. . . *Lam. Anim. sans Vertèbres*. IV. 151.;  
*Dumeril Dict. des Sci. Nat.* XXVI.  
 169.

*Mas.*—Nigra, flavo pubescens: caput inter oculos flavo bimaculatum: labium rufescens; oculi fusci: ocelli sordidè albidi: antennæ apice rufæ; articulus 1<sup>us</sup>. flavus, extùs et apice supra niger: prothoracis scutellum flavo marginatum; mesothoracis scuti dorsum flavo bimaculatum, latera flavo vittata; super scutelli dorsum macula flava, anticè valdè emarginata; epimera ferè tota flava: metathoracis scutellum apice acutè bispinosum: abdomen flavo bifasciatum et apice maculatum: pedes flavi; pro- et mesocoxæ nigræ; metacoxæ nigræ, flavo supra basi et subtus apice maculatæ; trochanteres fusci; pro- et mesofemora basi nigrofusca aut nigra; metafemora nigra, extùs flava nigro maculata; dentes nigri; 1<sup>us</sup>. brevis; 2<sup>us</sup>. et 3<sup>us</sup>. elongati, acuminati; cæteri obtusi, longitudine decrescentes; metatibiæ subtus nigrofusca; tarsi fulvi: alæ iridescentes, fusca; costa saturatior.

*Fem.*—Abdomen supra flavo 4-fasciatum, subtus rufofuscum, nitidum; fasciæ dissimiles, interruptæ: abdominis segmenti 1<sup>mi</sup>. oviductus medium attingens, fuscus; tegmina nigra. (Corp. long. 4½—6 lin.; alar. 9—12 lin.)

July; South of France. M. F. de Laporte has taken it near Paris.

Sp. 3. *Leuc. nigricornis*.<sup>c</sup> *Fem. Nigra, flavo-variegata, prothoracis scutello flavo-bifasciato, mesoscuti dorso immaculato, oviductu abdominis basim non attingente.*

*Leucospis dispar*. a. *Fonscol. Ann. Sci. Nat.* 26. 275.

Nigra, flavo pubescens: caput immaculatum: labium rufescens: oculi fusci: ocelli sordidè albidi: antennæ apice fusca; prothoracis scutellum flavo bifasciatum; fascia antica medio angustior: mesothoracis scuti latera flavo vittata; epimera flavo maculata; metathoracis scutellum inerme?; super dorsum macula flava, anticè valdè emarginata: abdomen utrinque supra flavo 4-maculatum, subtus rufo-fuscum; maculæ dissimiles: abdominis segmenti 1<sup>mi</sup>. oviductus apicem attingens, fuscus; tegmina nigra: pedes flavi; coxæ nigræ; metacoxæ supra basi et subtus apice flavo maculatæ; trochanteres nigrofusci; pro- et mesofemora basi nigra; metafemora nigra, externè flava nigro maculata; dentes nigri, 1<sup>us</sup>. brevis, 2<sup>us</sup>. et 3<sup>us</sup>. elongati, acumi-

<sup>c</sup> This, and many of the following species, were sent to me by M. F. de Laporte, with the MS. names which I have adopted.

nati; cæteri obtusi, longitudine decrescentes; metatibiæ subtus nigro-fuscæ; tarsi fulvi: alæ iridescentes, fuscæ; costa saturatior. (Corp. long. 6 lin.; alar. 12 lin.)

Taken near Paris, by M. F. de Laporte.

Sp. 4. Leuc. intermedia. Fem. *Nigra, flavo variegata, prothoracis scutello flavo-marginato, mesoscuti dorso unimaculato, oviductu abdominis basim superante.*

Leucospis dorsigera . *Rossi Mant. 134. 297. De Villers Ent. III. Pl. 8, fig. 17. Panz. Faun. Ins. Germ. 15. Tab. 17.*

Leucospis intermedia . *Illiger. Edit. Faun. Etrusc. II. 130. Klug Act. Nat. Cur. Berl. 67. 4.*

Nigra, flavo pubescens: caput inter oculos flavo bimaculatum: labium rufescens: oculi fuscii: ocelli sordidè albidi: antennæ nigræ; articulus 1<sup>us</sup>. flavus, extùs et apice supra niger: prothoracis scutellum flavo marginatum: mesothoracis scuti dorsum flavo unimaculatum, latera flavo vittata; super scutelli dorsum macula flava, anticè valdè emarginata; epimera flavo maculata: metathoracis scutellum apice acutè bispinosum: abdomen flavo 4-fasciatum, subtus rufo-fuscum; fasciæ dissimiles, basalis et apicalis interruptæ: oviductus mesothoracis ad scutelli medium productus, fuscus; tegmina nigra: pedes flavi; coxæ nigræ; metacoxæ supra basi flavo maculatæ; trochanteres fuscii; pro- et mesofemora basi nigra; metafemora nigra, extùs flava, nigro maculata; metatibiæ subtus nigro-fuscæ; tarsi fulvi: alæ iridescentes, fuscæ; costa saturatior. (Corp. long. 5 lin.; alar. 9 lin.)

July; South of France.

Sp. 5. Leuc. varia. Fem. *Nigra, flavo variegata, prothoracis scutello flavo bifasciato, mesoscuti dorso bimaculato, oviductu abdominis basim non attigente.*

Leucopsis intermedia . *Lamarck. Anim. sans Vertèbres. IV. 152.*

Leucopsis varia . . *Klug Act. Nat. Cur. Berl. VI. 67. 3.*

Nigra, flavo pubescens: caput inter oculos flavo bimaculatum: labium rufescens: oculi fuscii: ocelli sordidè albidi: antennæ

apice rufo-fuscae; articulus 1<sup>us</sup>. fulvus, apice fuscus; 2<sup>us</sup>. nigro-fuscus; 3<sup>us</sup>. et 4<sup>us</sup>. rufi: prothoracis scutellum flavo bifasciatum; fascia antica medio angustior, posticè incisa: mesothoracis scuti latera flavo vittata, dorsum flavo bimaculatum; super scutelli dorsum macula flava, anticè valde emarginata; epimera ferè tota flava: metathoracis scutellum apice acutè bispinosum: abdomen supra flavo 4-fasciatum, subtus fuscum; fasciæ dissimiles, interruptæ: abdominis segmenti 1<sup>mi</sup>. oviductus ferè basim attingens, fuscus; tegmina nigra: pedes fulvi; coxæ nigrae; metacoxæ supra basi et subtus apice flavo maculatæ; trochanteres nigri; pro- et mesofemora basi fusca; metafemora utrinque nigro maculata; dentes nigri; 1<sup>us</sup>. brevis; 2<sup>us</sup>. et 3<sup>us</sup>. elongati, acuminati; sequentes obtusi, longitudine decrescentes: alæ iridescentes, fuscae; costa saturatior. (Corp. long. 4—4½ lin.; alar. 9—9½ lin.)

July; South of France.

Sp. 6. Leuc. aculeata.

Leucospis aculeata . Klug. Act. Nat. Cur. Berl. VI. 68. 5.

DIVISIO II. *Metafemora subtus dentibus 10 armata.*

Sp. 7. Leuc. Biguetina. Mas et Fem. *Nigra, flavo variegata, prothoracis scutello flavo bifasciato, fascia postica abbreviata.*

Leucospis gibba . . Klug. Act. Nat. Cur. Berl. VI. 70. 8.

Leucospis Biguetina *Jurine, Nouv. Method. Hyménopt. &c.*  
307. Pl. 13. 45.

*Mas.* Nigra, pubescens: caput immaculatum: labium rufescens: oculi fusi: ocelli sordidè albidi: antennæ omninò nigrae: prothoracis scutellum flavo bifasciatum; fascia antica medio angustior, postica abbreviata: mesothoracis scuti latera flavo vittata; super scutelli dorsum fascia flava, anticè valde emarginata; epimera ferè tota flava: metathoracis scutellum apice acutè bispinosum: abdomen gibbum, supra flavo trifasciatum: pedes flavi; coxæ nigrae; trochanteres fusi; pro- et mesofemora basi fusca; metafemora nigra, apice supra flava, subtus dentibus 10 nigris armata, dens basalis magnus, cæteri minimi; metatibiæ subtus pallidè fuscae; tarsi fulvi: alæ iridescentes, subfuscae; costa et apex saturatiores.

*Fem.* Abdomen flavo 4-fasciatum; fasciæ 3<sup>a</sup>. et 4<sup>a</sup>. interruptæ, hæc quoque abbreviata: oviductus abdominis medium attingens. (Corp. long. 3½ lin.; alar. 6½ lin.)

*Var. β.—Fem.* Mesothoracis scuti dorsum flavo bimaculatum.

Described from specimens taken near Paris by M. F. de Laporte.

DIVISIO III. *Metafemora subtus dentibus 15 armata.*

Sp. 8. *Leuc. dorsigera.* Mas et Fem. *Nigra, flavo variegata, prothoracis scutello flavo bifasciato, fascia antica abbreviata.*

*Leucospis cœlogaster* . *Schrank Schriften Berl. Gesellschaft.* 1. 301. Tab. 8. fig. 4—6. *Faun Boica* II. 2. 221. 1980. *Gmel.* 2741. 2. *Oliv. Encycl. Hist. Nat. Ins.* Tom. VII. 532. 3. *Hochemwarth. Schriften Berl. Ges.* VI. 344. Tab. 8. fig. 34.

*Leucospis dubia* . . *Schrank. Fauna Boica.* II. 2. 222. 1981.

*Leucospis dorsigera* . *Fabr. Ent. Syst.* 2. 246. 2.; *Syst. Piezat.* 168. 2. *Latr. Hist. Nat. des Ins.* XIII. 281. 1. *Gen. Crust. et Insect.* IV. 24. *Règne Anim.* III. 475; *Nouv. Edit.* V. 296. *Nouv. Dict. d'Hist. Nat.* XVII. 513. Pl. G. 3. 7. *Panz. Faun. Ins. Germ.* 58. 15. *Illig. Edit. Faun. Etrusc.* II. 130. et 280. 856. β. *Spin. Ins. Lig.* Fasc. I. 63. *De Vill. Ent.* III. 260. 1. Tab. 8, fig. 17. *Klug Act. Nat. Cur. Berl.* 69. 6.

*Leucospis dispar* . . *Fabr. Syst. Piezat.* 169. 6.

*Leucospis intermedia* *Spin. Ins. Lig.* Fascic 4. 236. *Fonscol. Ann. Sci. Nat.* 26. 274.

*Leucopsis dorsigera* . *Lam. Anim. sans Vertèbres.* IV. 151. *Dumeril. Dict. des Sci. Nat.* 26. 169. Pl. 34, fig. 2.

*Mas.* Nigra, pubescens: labium rufescens: oculi fuscii: ocelli sordidè albidii: antennæ nigrae; articulus 1<sup>us</sup>. flavus, apice et supra fuscus:

prothoracis scutellum flavo bifasciatum; fascia antica abbreviata; postica per scutelli latera producta: mesothoracis scutum immaculatum; super scutelli dorsum fascia flava integra aut paullò emarginata; epimera flavo maculata: metathoracis scutellum inerme: abdomen supra flavo 4-fasciatum; fasciæ 1<sup>ma</sup>. et 4<sup>ta</sup>. abbreviatæ: pedes flavi; coxæ nigræ; metacoxæ subtus apice flavo maculatæ; trochanteres nigro-fusci; pro- et mesofemora basi fusca; metafemora nigra, subtus versus basin et supra flava; dentes nigri, basalis magnus, cæteri minimi; metatibiæ subtus nigræ; tarsi fulvi: alæ iridescentes, subfuscæ; costa et apex saturatiores.

*Fem.* Scapi omninò flavi: abdomen supra flavo trifasciatum, subtus rufo-fuscum; fasciæ interruptæ, inter 1<sup>am</sup>. et 2<sup>am</sup>. maculæ duæ laterales flavæ: oviductus abdominis basim attingens: profemora nigro-fusca, apice flava; intermedia pallidiora: protibiæ extùs fusco vittatæ. (Corp. long.  $2\frac{2}{3}$ —4 lin.; alar. 4—6 lin.)

*Var. β.—Mas.* Antennæ omninò nigræ: prothoracis fascia postica non per scutelli latera producta: metacoxæ nigræ, apice subtus fusco maculatæ; pro- et mesofemora nigro-fusca, apice flava; metafemora nigra, basi subtus et supra apice flavo maculata; pro- et mesotibiæ extùs fusco vittatæ; metatibiæ subtus et intùs nigræ.—Species distincta?

*Var. γ.—Fem.* Abdominis fascia apicalis angusta, abbreviata: metafemora nigra, supra apice flava.

Described from specimens taken near Paris, by M. F. de Laporte.

### Sp. 9. Leuc. bifasciata.

Leucospis, &c. . . *Fuessly Archiv.* III. Tab. 18. fig. 11.

Leucospis bifasciata . *Klug. Act. Nat. Cur. Berl.* 70. 7.

### Family CHALCIDIDÆ.

Structura varia: reliquis hujus ordinis characteres sequentes immutati eam distinguunt; oviductus infra abdomen occultus; metapedes femoribus et coxis maximis, tibiis arcuatis; proalæ ultra medium nervus ordinarius ramulum emittens brevissimum, nonnunquam furcatum: ocelli 3, supra verticem trigonè dispositi: pro- et mesocoxæ trigonæ, mediocres: tarsi plerumque graciles; articulus 1<sup>us</sup>. elongatus; sequentes longitudine decrescentes; ultimus 2<sup>o</sup> longior.



## Characteres Generum.

Caput	{	inerm. Petiolus	{	elongatus.	{	medio frontis insertæ . . . . .	I. SMIERA.								
				Antennæ		prope os insertæ . . . . .	II. EPITRANUS.								
	{	{	brevissimus.	{	Antennæ	{	medio frontis insertæ . . . . .	III. CHALCIS.							
							{	{	prope os insertæ.	{	acuminatæ . . . . .	IV. HALTICELLA.			
									{		{	Metatibiæ	{	non acuminatæ.	V. HOCKERIA.
												apice		Metatarsi	{
	armatum . . . . .							VII. DIRHINUS.							

GENUS I.—SMIERA, *Spinola*.

Sphex. *Linnæus, Fabricius, Villers, Sulzer, Schrank, Christ.*

Chrysis. *Fabricius.*

Vespa. *Geoffroy, Fourcroy.*

Chalcis. *Fabricius, Gmelin, Panzer, Hubner, Rossi, Latreille, Stewart, Olivier, Spinola, Donovan, Lamarck, Leach, Samouelle, Dalman, Fonscolombe, Cuvier, Jurine, Illiger, Walckenaer, Dumeril.*

Smiera. *Spinola, Curtis.*

Corpus punctatum, pubescens: caput mediocre, transversum, thorace vix angustius, anticè ubi scapi insident excavatum: antennæ 13-articulatæ, medio frontis insertæ, *maris* fusiformes aut filiformes, *fem.* clavatæ; articulus 1<sup>us</sup>. elongatus, in-canaliculo frontali receptus; 2<sup>us</sup>. minutus; 3<sup>us</sup>. minimus, vix conspicuus; 4<sup>us</sup>. elongatus; 5<sup>us</sup>. et 5 sequentes longitudine decrescentes; clava triarticulata, ovata: labrum breve, transversum, apice ciliatum: mandibulæ parvæ; una ferè recta, subquadrata, tridentata; altera arcuata, bidentata; dentes obtusi: maxillæ elongatæ, apicem versus internè in lobum productæ latum ciliatum apice incisum; palpi 4-articulati, filiformes; articuli 1<sup>us</sup>. et 3<sup>us</sup>. breviores; 2<sup>us</sup>. et 4<sup>us</sup>. longiores: mentum elongatum, angustum; palpi 3-articulati, subfiliformes, articulus 3<sup>us</sup>. acuminatus, setosus: labium angustum, fissum: thorax ovatus: prothoracis scutellum minimum, posticè incurvum; pectus parvum: mesothoracis scutum maximum; parapsides optimè determinatæ; scutellum maximum, semicirculus; paraptera et epimera trigona, maxima; sternum parvum: metathoracis scutellum parvum;

postscutellum maximum; paraptera et epimera trigona; sternum parvum: petiolus elongatus, linearis, abdomine brevior: abdomen glabrum, gibbum, compressum, coarctatum, nonnunquam apice elongatum et acuminatum; segmentum 1<sup>um</sup>,<sup>d</sup> maximum; cætera breviora; segmenta ventralia pauca *maris* abdominis apicem versus conspicua: *fem.* lamina angusta segmenta omnia ventralia et oviductum nisi ad apicem abscondit: propedes breves; trochanteres parvi; femora subelavata; tibiæ apice spina elongata valida armata; ungues elongati, subarcuati: pulvilli minuti: mesopedes longiores et graciliores, cætera propedum: metapedum coxæ maximæ, elongatæ; femora maxima, ovata, subtus dentibus plurimus armata, quorum basalis maxima; tibiæ valdè arcuatæ, subtus canaliculatæ, femoribus appressæ; apicis angulus internus productus, acuminatus; cætera propedum: proalæ nervus ordinarius ante medium costæ junctus, inde per costam ferè ad alæ apicem productus: nervi duo longitudinales sinuati, indistincti, anticus furcam emittens ramulo stigmatali junctam: metalæ angustæ; nervus ordinarius ultra medium productus, apice hamo armatus.

DIVISIO 1. *Abdomen breve, vix longius quàm latum.*

Latreille supposed that these insects infest the *Stratiomydæ*, or other *Diptera*, that are aquatic in their larva state. *C. xanthostigma*, Dalm. is parasitic upon a species of *Hylotoma*.

Sp. 1. Smi. nigrifex. Mas et Fem. *Nigra, petiolo et pedibus flavis, his nigro variegatis.*

Sphex nigrifex. . . Sulzer, *Hist. Ins.* 191. 1. fig. 27. 1.

Vespa &c. . . . Geoffroy, *Ins. Par.* II. 380. 16.

Vespa dearticulata. *Fourc. Ent. Par.* Tom. II. 437. 16.

Sphex sispes . . . *Fabr. Sp. Ins.* I. 446. 61. *Villers, Ent.* Tom. I. 222. 6.

Chrysis sispes . . . *Fabr. Syst. Ent.* 359. 15.

Chalcis sispes . . . *Fabr. Mant. Ins.* I. 272. 1. *Ent. Syst.* II. 194. 1. *Syst. Piezat.* 159. 1. *Gmel. Syst. Nat.* I. 5. 2742. 1. *Hubn. Naturf.* 24. 54. 18. Tab. 2.

<sup>d</sup> The second segment of my preceding descriptions; the petiole being considered as the first. The other alterations require no explanation.

fig. 22. *Panz.* 77. 11. *Stew.* II. 236. *Rossi, Faun. Etrusc.* II. 58. 802. *Oliv. Encycl. Méthod.* V. 438. 2. *Spin. Ins. Lig.* fasc. 1. 62. *Latr. Règne Anim.* III. 474; *Nouv. Edit.* V. 295. *Nouv. Dict. d'Hist. Nat.* VI. 23. 10. *Lam. Anim. sans Vertèbres,* IV. 153. *Fonscol. Ann. Sci. Nat.* XXVI. 275. 1.

*Smiera sispes* . . . *Spinola, Ann. du Muséum d'Hist. Nat.* Tom. XVII.

*Smiera petiolatus* . *Curtis Brit. Ent.* 472.

*Mas.*—Nigra, pilis canis vestita: caput inter oculos flavo bimaeculatum: oculi ocellique fusci: antennæ fusiformes, corporis dimidio longiores; scapus nitidus; clava articulis 2 præcedentibus paullo brevior: palpi maxillares articulis 4; 1<sup>us</sup>. mediocris; 2<sup>us</sup>. vix longior; 3<sup>us</sup>. brevior; 4<sup>us</sup>. elongatus, fusiformis, setosus: palpi labiales articulis 3; 1<sup>us</sup>. et 2<sup>us</sup>. breves; 3<sup>us</sup>. longior: mesothoracis scutellum apice bisponosum; squamulæ flavæ: petiolus flavus: abdomen nitidum; segmenta 1<sup>um</sup>. et 2<sup>um</sup>. maxima; sequentia parva, subæqualia: pedes nigri; metacoxæ supra apice spinosæ; pro et mesofemora apice flava; metafemora flava, apice et supra basi nigra, subtus dentibus 13 nigris armata; pro et mesotibiæ fuscæ, apice basique flavæ; metatibiæ apice flavæ; tarsi fulvi, apice fusci: alæ subfuscæ; nervi fusci.

*Fem.*—Antennæ breviores, tenuiores, clavatæ: metafemorum dens basalis multo longior et crassior: petiolus brevior: abdominis segmenti 1<sup>i</sup>. latera latiora; 2<sup>um</sup>. parvum, 1<sup>i</sup>. margine ferè occultum; 3<sup>um</sup>. magnum, latera 1<sup>i</sup>. margine ferè occulta; sequentia minima: oviductus rufo-fuscus. (Corp. long. 3 lin.; alar. 5 lin.)

Common in the South of Europe; rare in the North. July; South of France; on aquatic plants. M. F. de Laporte has taken it near Paris.

Sp. 2. *Smi. sispes.* *Mas et Fem. Nigra, metafemoribus tarsisque rufis.*

*Sphex sispes* . . *Linn. Syst. Nat.* XII. 2. 943. 13. *Faun. Suec.* 1657.

*Chalcis clavipes.* *Fabr. Mant. Ins.* 1. 272. 2. *Ent. Syst.* III. 2. 195. 2. *Syst. Piczat.* 159. 2. *Gmel. Syst. Nat.* 1. 5. 2742. 2. *Hubn.*

*Naturf.* 24. 56. 19. Tab. 2. fig. 23.  
*Oliv. Encycl. Méthod.* V. 438. *Rossi Faun. Etrus.* II. 58. 803. *Latr. Règne Anim.* III. 474; *Nouv. Edit.* V. 295. *Nouv. Dict. d'Hist. Nat.* VI. 13. Pl. B. 23. 10. *Panz.* 78. fig. 15. *Don.* XI. 57. 379. *Lam. Anim. sans Vertèbres,* IV. 153. *Leach, Ed. Encycl.* IX. 144. *Samouelle,* 271. Pl. 8. fig. 6. *Fonscol. Ann. Sci. Nat.* XXVI. 276. 2.

- Smiera clavipes* . *Spin. Ann. du Muséum, &c.* Tom. XVII.  
*Chalcis sispes* . *Dalm. Act. Kongl. Vetensk. Acad. Handl. für ür.* 1820.  
*Smiera sispes* . . *Curtis, Brit. Ent.* 472.

*Mas.*—Nigra, pilis canis vestita: oculi ocellique fusci: antennæ subfiliformes, corporis dimidio breviores; scapus nitidus: palpi maxillares articulis 4; 1<sup>us</sup>. brevis, extùs excavatus; 2<sup>us</sup>. multò longior; 3<sup>us</sup>. brevis, 1<sup>o</sup>. æqualis: mentum quàm *S. nigrificis* latius: palpi articulis 3 ferè æqualibus; 2<sup>us</sup>. paullò brevior: mesothoracis scutellum apice bisponosum; squamulæ fuscae: petiolus quàm *S. nigrificis* brevior: abdomen nitidum: pedes nigri; pro- et mesofemora apice rufa; metafemora rufa, apice nigra, subtus dentibus 8 inæqualibus armata; pro- et mesotibiæ nigro-fuscae; metatibiæ nigrae; tarsi rufi, apice fusci; alæ subfuscae, apice fuscae; nervi fusci.

*Fem.*—Antennæ paullò breviores, clavatae: oviductus rufo-fuscus. (Corp. long.  $2\frac{3}{4}$ — $3\frac{1}{4}$  lin.; alar.  $4\frac{3}{4}$ — $5\frac{1}{4}$  lin.)

*Var. β.*—Metafemora extùs flavo maculata.

Described from specimens taken at Paris by M. F. de Laporte. Unlike *C. nigrifex*, it abounds more in the North than in the South of Europe.

There are three more described European species; viz.—

Sp. 3. *Smi. melanaris*.

*Chalcis melanaris* . . *Dalm. Act. Kongl. Vetensk. Acad. Handl. für ür.* 1820.

*Smiera Macleanii* . . *Curtis, Brit. Ent.* 472.

Taken lately in Essex.

Sp. 4. Smi. biguttata.

Chalcis biguttata . . . *Spin. Ins. Lig.* Fasc. 4<sup>us</sup>. 231.

Sp. 5. Smi. xanthostigma.

Chalcis xanthostigma. *Dalm. Act. Kongl. Vetensk. Acad. Handl. für är.* 1820.

DIVISIO II. *Abdomen apice elongatum et acuminatum.*

The exotic species of this division, and of some genera nearly allied to it, are very numerous.

Sp. 6. Smi. subpunctata. Mas et Fem. *Flava, nigro variegata, alis hyalinis.*

*Mas.*—Flava, vix pubescens: caput subtus nigro fasciatum: oculi virides: ocelli fuscii: antennæ subfusiformes, fuscae, subtus fulvæ: mesothoracis scutum anticè nigrum, medio nigro vittatum; parapsides nigro maculatæ; paraptera nigro maculata, maculæ inter scutum et scutellum conjunctæ; super scutellum macula teliformis nigra; pectus nigro bimaculatum: metathoracis scutellum nigro fasciatum: petiolus abdominis dimidio brevior: abdomen elongato-ovatum, nitidum, fulvum; maculæ 5 dorsales et apex nigrae; segmentum 1<sup>um</sup>. flavum, magnum; cætera parva; pedes flavi; metacoxæ extùs nigro maculatæ; metafemora subtus basi et apice nigro maculata, subtus dentibus 14 nigris armata; dens basalis magna, cæteri minimi; metatibiæ basi, apice et subtus fuscae; ungues et pulvilli fuscii: alæ hyalinæ, iridescentes; nervi fulvi.

*Fem.*—Antennæ subclavatae: abdomen apice acuminatum; segmentum 1<sup>um</sup>. magnum; 2<sup>um</sup>. et 4 sequentia minuta; cætera elongata: oviductus fuscus. (Corp. long. 2½ lin.; alar. 3 lin.)

*Var. β*—*Mas*, abdomen fulvum, fusco fasciatum.

Taken in St. Vincent's island, by the Rev. Lansdown Guilding: described also from a Cayenne specimen in the collection of M. F. de Laporte.

Sp. 7. Smi. fulvescens. Mas et Fem. *Lætè ferruginea, abdomine fusco, alis hyalinis.*

*Mas.*—Ferruginea, subtus pallidior, vix pubescens: oculi virides: ocelli fusci: antennæ subfusiformes, fuscæ, subtus fulvæ: petiolus gracilis, abdominis dimidio brevior: abdomen elongato-ovatum, nitidum, ferrugineum, supra fusco fasciatum: pedes flavescentes; metafemora subtus dentibus 14 nigris armata; dens basalis magna, cæteri minimi; metatibiæ subtus fuscæ; ungues et pulvilli fusci: alæ hyalinæ, iridescentes; nervi fulvi.

*Fem.*—Antennæ subclavatæ: petiolus quàm *maris* brevior: abdomen acuminatum; segmenta apicalia elongata; apex nigro-fusca: oviductus omninò occultus. (Corp. long.  $2\frac{1}{2}$  lin.; alar. 3 lin.)

*Var. β.*—*Mas*, abdomen fuscum, basi fulvo fasciatum.

Taken in St. Vincent's island, by the Rev. Lansdown Guilding.

## GENUS II.—EPITRANUS,<sup>e</sup> Walker.

*Fem.*—Corpus punctatum, sparsè pubescens: caput mediocre, transversum, ferè trigonum: antennæ 14-articulatæ, subfusiformes, corporis dimidio breviores, basi approximatae, prope os insertæ: articulus 1<sup>us</sup>. valdè elongatus, flagelli dimidio longior; 2<sup>us</sup>. brevis; 3<sup>us</sup>. minimus; 4<sup>us</sup>. et 11 sequentes subæquales; clava 3-articulata, conica, articulis 10<sup>o</sup>. et 11<sup>o</sup>. brevior et angustior: mandibulæ angustæ; una recta, bidentata, dentes acuti, externus magnus; altera apice arcuata, dente brevi acuto terminata: thorax ovatus: prothoracis scutellum mediocre, posticè incurvum; pectus parvum: mesothoracis scutum mediocre; parapsides optimè determinatæ, maximæ, convexæ; paraptera et epimera trigona, magna; scutellum maximum, ferè rotundum; sternum parvum: metathoracis scutellum et postscutellum parva; sternum magnum: petiolus linearis, abdominis dimidio longior: abdomen elongato-ovatum, vix compressum, subtus carinatum, apice acuminatum; segmentum 1<sup>um</sup>. maximum, ferè ad apicem productum; cætera minima, brevissima: oviductus occultus: pro- et mesopedum coxæ parvæ; femora clavata; tibiæ apice spina elongata, valida, arcuata armatæ; ungues et pulvilli minuti: metapedum coxæ apice angustiores; femora subtus dentibus 9 armata; quorum basalis maximus, obtusus; cæteri minimi, acuti; tibiæ *Smieræ*: alæ breves; nervi indistincti.

Sp. 1. *Epi. fulvescens.* *Fem. Rufo-fuscus, tarsis flavis, alis albis.*

<sup>e</sup> ἐπι ἀντὲ, τρανός planus.

Caput punctatum : oculi ocellique fuscii : antennæ fusæ ; articulus 1<sup>us</sup>. fulvus : thorax punctatus ; squamulæ flavæ : petiolus striatus : abdomen nitidum, glabrum : metatibiæ subtus fusæ ; tarsi flavi ; ungues et pulvilli fuscii : alæ albæ, iridescentes ; nervi flavi. (Corp. long. 1½—2 lin. ; alar. 2—2½ lin.)

Taken in St. Vincent's Island, by the Rev. Lansdown Guilding.

GENUS III.—CHALCIS; *Fabricius*.

Vespa . . . *Linnaeus, Geoffroy, Fourcroy*.

Chalcis . . . *Fabricius, Gmelin, Rossi, Latreille, Panzer, Olivier, Lamarck, Cuvier, Spinola, Dumeril, Dalman, Leach*.

Brachymeria. *Westwood*.

Corpus punctatum, pubescens : caput mediocre, breve, transversum, thorace non latius, anticè ubi scapi insident excavatum : oculi mediocres : ocelli trigonè dispositi : antennæ 13-articulatæ, plus minusve fusiformes, medio frontis insertæ ; articulus 1<sup>us</sup>. elongatus ; 2<sup>us</sup>. mediocris ; 3<sup>us</sup>. minimus ; 4<sup>us</sup>. et 6 sequentes crassi, subæquales, longitudine decrescentes ; clava 3-articulata, conica, articulis 2 præcedentibus brevior : mandibulæ arcuatæ, bidentatæ ; dentes obtusi, internus brevior : maxillæ elongatæ, angustæ, intùs apicem versus in lobum tripartitum productæ : palpi 4-articulati, ferè filiformes ; articuli 1<sup>us</sup>. et 3<sup>us</sup>. breves ; 2<sup>us</sup>. longior ; 4<sup>us</sup>. multò longior, fusiformis : mentum ovatum : palpi articulis 3 ; 1<sup>us</sup>. et 3<sup>us</sup>. apice crassiores ; 2<sup>us</sup>. brevis : labium angustum, fissum : thorax ovatus : prothoracis scutellum magnum, subquadratum, posticè excavatum, anticè angustius ; pectus parvum : mesothoracis scutum maximum ; parapsides benè determinatæ ; scutellum maximum, latius quàm longum, apice plerumque bispinosum ; paraptera et epimera magna, trigona ; sternum parvum : metathorax parvus ; scutellum mediocre : petiolus brevissimus : *maris* abdomen gibbum, vix duplo longius quàm latum ; segmentum 1<sup>um</sup>. maximum, dimidium occupans ; 2<sup>um</sup>. mediocre ; sequentia minima ; segmenta 7 aut plura ventralia subtus abdomen conspicua, quorum 1<sup>um</sup>. et 2<sup>um</sup>. magna, reliquæ minuta : *fem.* abdomen paullò longius et acutius, infra carinatum ; segmenta ventralia vix conspicua : propedes mediocres ; coxæ trigonæ ; trochanteres parvi ; femora paullò incrassata ; tibiæ subclavatæ, reetæ, apice spina magna arcuata armatæ ; ungues et

pulvilli mediocres: mesopedes paullò longiores et tenuiores; spina tibialis brevior et gracilior; cætera propedum: metapedes et alæ *Smieræ*.

Sp. 1. Chal. femorata. Mas. *Nigra, pedibus flavis, meta-femoribus nigro fasciatis.*

Chalcis femorata . *Panz. Faun. Ins. Germ. Fasc. 84. fig. 16.*  
Chalcis flavipes . *Latr. Gen. Crust. et Insect. IV. 26.*

Nigra, pilis canis vestita: oculi fusci: ocelli rufo-fusci: antennæ subfusiformes, nigrae, apice rufo-fuscae: mesothoracis scutellum apice acutè bispinosum; squamulae flavae: abdomen nitidum, punctatum: pedes flavi; coxae nigrae; trochanteres fusci; pro- et mesofemora basi nigra; metafemora nigro cingulata, subtus dentibus 12 inæqualibus armata; pro- et mesotibiæ subtus fusco maculatae; metatibiarum canaliculorum margines fusci; ungues et pulvilli fusci: alæ subhyalinae; nervi fusci. (Corp. long.  $2\frac{1}{2}$ —3 lin.; alar.  $4\frac{1}{2}$ —5 lin.)

Taken near Paris, from the pupæ of *Zygæna Filipendulae*, by M. F. de Laporte.

Sp. 2. Chal. flavipes. Fem. *Nigra, pedibus flavis, meta-femoribus basi nigris, alis subhyalinis.*

Chalcis flavipes . *Fabr. Ent. Syst. II. 197. 10. Syst. Piezat. 167. 32. Latr. Hist. Nat. des Ins. XIII. 220. Panz. Fasc. 78, fig. 16. Fonscol. Ann. Sci. Nat. XXVI. 276.*

Nigra, pilis canis vestita: oculi fusci: ocelli rufo-fusci: antennæ fusiformes, nigrae, apice rufo-fuscae: mesothoracis scutellum inerme; squamulae flavae: abdomen nitidum, ferè glabrum: pedes flavi; coxae nigrae; trochanteres fusci; pro- et mesofemora basi nigra; metafemora nigra, apice flava, subtus dentibus 13 aut 14 inæqualibus armata; pro- et mesotibiæ subtus fusco maculatae; metatibiæ subtus fuscae; ungues et pulvilli fusci: alæ subhyalinae; nervi fusci. (Corp. long. 3 lin.; alar. 5 lin.)

Taken near Paris, by M. F. de Laporte. It may be the female of the preceding species.



Sp. 3. Chal. distinguenda. Mas et Fem. *Præcedenti, minor, nigra, pedibus flavis, metafemoribus basi nigris, alis hyalinis.*

*Mas.* Nigra, pilis canis vestita : oculi fuscii : ocelli rufo-fuscii : antennæ subfusiformes, nigræ, apice rufo-fuscæ : mesothoracis scutellum dentibus 2 brevissimis obtusis armatum ; squamulæ flavæ : abdomen nitidum, sparsè punctatum : pedes flavi ; coxæ nigræ ; trochanteres fuscii ; femora nigra, apice flava ; metafemora subtus dentibus 12 armata ; pro- et mesotibiæ subtus fusco maculatæ ; metatibiæ subtus fuscæ ; ungues et pulvilli fuscii : alæ hyalinæ ; nervi fuscii.

*Fem.* Antennæ fusiformes, paullò breviores et crassiores : mesothoracis scutellum inerme. (Corp. long. 2—2½ lin. ; alar. 4—4½ lin.)

Taken near Paris, by M. F. de Laporte. July ; South of France.

Sp. 4. Chal. tibialis. Mas. *Nigra, pedibus flavis, pro- et mesotibiis nigro maculatis.*

Nigra, pilis canis vestita : oculi fuscii : ocelli rufo-fuscii : antennæ nigræ, apice rufo-fuscæ : mesothoracis scutellum apice bispinosum ; squamulæ flavæ : abdomen nitidum, sparsè punctatum et pubescens : pedes flavi ; coxæ nigræ ; trochanteres fuscii ; femora nigra, apice flava ; metafemora subtus dentibus 12 armata ; pro- et mesotibiæ extùs et subtus nigro maculatæ ; metatibiæ subtus nigræ ; ungues et pulvilli fuscii : alæ hyalinæ ; nervi fuscii. (Corp. long. 2 lin. ; alar. 4 lin.)

Taken near Paris, by M. F. de Laporte.

Sp. 5. Chal. annulipes. Mas et Fem. *Nigra, pedibus flavis, tibiis omnibus nigro maculatis.*

Chalcis flavipes . . *Fabr. Ent. Syst. II. 197. 10. Syst. Piezat. 167. 32. ?*

*Mas.* Nigra, pilis canis vestita : oculi fuscii : ocelli rufo-fuscii : antennæ nigræ, apice rufo-fuscæ : mesothoracis scutellum apice tubercu-

latum; squamulæ flavæ: abdomen nitidum, sparsè punctatum et pubescens: pedes flavi; coxæ nigræ; trochanteres fusci; pro- et mesofemora basi nigra; metafemora nigra, apice supra flavo maculata, subtus dentibus 12? armata; pro- et mesotibiæ extùs et subtus nigro maculatæ; metatibiæ basi et medio nigro-fuscæ, subtus quoque nigro-fuscæ; ungues et pulvilli fusci: alæ hyalinæ; nervi fusci.

*Fem.* Antennæ paullò breviores et crassiores: scutellum inerme. (Corp. long.  $1\frac{1}{4}$ — $2\frac{1}{2}$  lin.; alar.  $2\frac{1}{4}$ — $4\frac{1}{2}$  lin.)

Described from specimens taken in St. Vincent's Island, by the Rev. Lansdown Guilding; also, from a Cayenne one in the collection of M. de Laporte.

Sp. 6. Chal. cingulata. *Fem.* *Nigra, pedibus flavis, tibiis omnibus fusco maculatis.*

Nigra, pilis canis vestita: oculi fusci: ocelli rufo-fusci: antennæ nigræ, apice rufo-fuscæ: mesothoracis scutellum inerme; squamulæ flavæ: abdomen nitidum, ferè glabrum, sparsè pubescens: pedes flavi; coxæ nigræ; trochanteres fusci; femora nigra, apice flava; metafemora subtus dentibus 12 armata; pro- et mesotibiæ extùs et subtus fusco maculatæ; metatibiæ supra medio et subtus omninò fuscæ; ungues et pulvilli fusci: alæ hyalinæ; nervi fusci. (Corp. long. 2— $2\frac{1}{2}$  lin.; alar. 4— $4\frac{1}{2}$  lin.)

Taken near Paris, by M. F. de Laporte.

Sp. 7. Chal. minuta. *Mas. et Fem.* *Nigra, pedibus flavis nigro variegatis, tarsis rufis.*

Vespa minuta . . . *Linn. Syst. Nat.* 952. 28.

Vespa, &c. . . . *Geoffroy. Ins.* II. 380. 15.

Vespa femoralis . . . *Fourc. Ent. Par.* II. 437. 15.

Chalcis minuta . . . *Fabr. Mant. Ins.* I. 272. 3. *Ent. Syst.* II. 195. 4. *Syst. Piezat.* 165. 23. *Gmel. Syst. Nat.* I. 5. 2742. 3. *Latr. Hist. Nat. des Ins.* XIII. 220. *Règne Anim.* III. 474; *Nouv. Edit.* V. 296. *Nouv. Dict. d'Hist.*

*Nat.* VI. 13. *Rossi, Faun. Etrusc.*  
 II. 58. 804. *Oliv. Encycl. Méthod.*  
 V. 439. 5. *Panz. Fasc.* 32. Tab. 6.  
*Lam. Anim. sans Vertéb.* IV. 153.  
*Dum. Dict. des Sci. Nat.* VIII. 69.  
 Pl. 34. fig. 1. *Leach, Edin. Encycl.*  
 IX. 144. *Fonscol. Ann. Sci. Nat.*  
 XXVI. 277.

*Chalcis femorata* . *Dalm. Kongl. Vetens. Acad. für ür*  
 1820.

*Brachymeria minuta.* *Westw. Lond. & Edinb. Phil. Mag.*  
*Third Series.* Vol. I. 127.

*Mas.* Nigra, pilis canis vestita: oculi fusci: ocelli rufo-fusci: antennæ nigrae, apice rufo-fuscae: mesothoracis scutellum apice bispinosum; squamulae flavae: abdomen ferè glabrum, sparsè pubescens: pedes flavi; coxae nigrae; trochanteres fusci; femora nigra, apice flava; metafemora subtus dentibus 12 armata; tibiae fusco cingulatae; metatibiae subtus quoque fuscae, basi rufo-fuscae; tarsi pallidè rufi; ungues et pulvilli fusci: alae subfuscae; nervi fusci.

*Fem.* Antennæ paullo breviores et crassiores: scutellum inerme: abdomen longius. (Corp. long. 2—2½ lin.; alar. 4—4½ lin.)

*Var. β.*—*Mas.* Tibiæ nigro cingulatae.

Taken near Paris, by M. F. de Laporte. July; South of France. September; Lizard Point, Cornwall.

Sp. 8. *Chal. podagrica.* *Fem. Nigra, pedibus rufis, flavo variegatis.*

*Chalcis podagrica.* *Fabr. Mant. Ins.* I. 272. 5. *Ent. Syst.*  
 II. 196. 6. *Syst. Piezat.* 166. 24.  
*Gmel. Syst. Nat.* 1. 5. 2743. 5. *Hubn.*  
*Naturf.* 24. 57. 20. Tab. 2. fig. 24.  
*Oliv. Encycl. Méthod.* V. 439. 7.  
*Fonscol. Ann. Sci. Nat.* 26. 277.

*Chalcis femorata.* *Fem. Dalm. Kongl. Vetens. Acad. Handl.*  
*für ür* 1820.

*Nigra, pilis canis vestita: oculi fusci: ocelli rufo-fusci: antennæ nigrae, apice rufo-fuscae: mesothoracis scutellum apice tubercu-*

latum; squamulæ flavæ: abdomen ferè glabrum, sparsè pubescens: pedes rufi; coxæ nigræ; metacoxæ apice rufæ; femora apice supra flava: metafemora subtus dentibus 12 armata; tibiæ basi et apice flavo maculatæ; metatibiæ subtus fuscæ; ungues et pulvilli fusci: alæ hyalinæ; nervi fusci. (Corp. long. 2—2½ lin.; alar. 4—4¼ lin.)

*Var. β.* Pro- et mesopedes ferè omninò rufi.

Taken by M. F. de Laporte, near Paris. July; South of France.

Sp. 9. Chal. vicina. Fem. *Nigra, pedibus nigris, femoribus apice tarsisque rufis.*

*Nigra*, pilis canis vestita: oculi fusci: ocelli rufo-fusci: antennæ nigræ: mesothoracis scutellum inerme; squamulæ flavæ: abdomen ferè glabrum, sparsè pubescens: pedes nigri; trochanteres fusci; pro- et mesofemora apice rufo-flavescentia; metafemora apicem versus rufescentia, apice supra flavo notata, subtus dentibus 12 armata; pro- et mesotibiæ nigro-fuscæ, apice basi subtusque rufescentes; metatibiæ nigræ, supra basim versus et apice flavo maculatæ; tarsi pallidè rufi; ungues et pulvilli fusci: alæ subfuscæ; nervi fusci. (Corp. long. 1¾—2 lin.; alar. 3¾—4 lin.)

Taken near Paris, by M. F. de Laporte.

Sp. 10. Chal. parvula. Mas et Fem. *Nigra, pedibus nigris, femoribus apice tarsisque flavis.*

*Chalcis minuta.* *Dalm. Kongl. Vetens. Acad. Handl. für år 1820.*

*Mas.* *Nigra*, pilis canis vestita: oculi fusci: ocelli rufo-fusci: antennæ nigræ, apice rufo-fuscæ: mesothoracis scutellum apice bispinosum; squamulæ flavæ: abdomen ferè glabrum, sparsè pubescens: pedes nigri; trochanteres fusci; femora apice flava; mesofemora subtus dentibus 12 armata; pro- et mesotibiæ nigro-fuscæ, apice basi subtusque flavæ; metatibiæ extùs basi et apice flavescentes; tarsi flavi; ungues et pulvilli fusci: alæ hyalinæ; nervi fusci.

*Fem.* Antennæ paullò breviores et crassiores: scutellum inerme; abdomen longius. (Corp. long. 1—1¾ lin.; alar. 2—3¼ lin.)

Taken near Paris, by M. F. de Laporte. July; South of France.

GENUS IV. HALTICELLA,<sup>f</sup> *Spinola*.

Chalcis. . *Fabricius, Gmelin, Rossi, Hubner, Olivier, Latreille, Spinola.*

Halticella. *Spinola.*

Caput mediocre, transversum, thorace vix angustius, anticè ubi insident scapi excavatum: antennæ 13-articulatæ, prope os insertæ; *maris* subfusiformes, *fem.* subclavatæ, paullò breviores; articulus 1<sup>us</sup>. elongatus, 2<sup>us</sup>. cyathiformis, 3<sup>us</sup>. minimus, 4<sup>us</sup>. et 6 sequentes subæquales, magni; clava triarticulata, conica, articulis 2 præcedentibus brevior: mandibulæ arcuatæ, apice bidentatæ; dentes vix acuti: maxillæ elongatæ, apice intùs in lobum quasi articulatam productæ; palpi 4-articulati, breves; articulus 1<sup>us</sup>. mediocris; 2<sup>us</sup>. crassior, cyathiformis; 3<sup>us</sup>. parvus; 4<sup>us</sup>. elongatus, fusiformis, setosus: mentum elongato-ovatum; palpi 3-articulati, menti apice insertæ, breves; articulus 2<sup>us</sup>. minimus: labium rotundum, integrum, anticè ciliatum: thorax ovatus: pectus parvum: prothoracis scutellum mediocre, subquadratum, posticè incisum: mesothoracis scutum magnum; parapsidum suturæ distinctæ; scutellum magnum, subrotundum: metathoracis scutellum, paraptera et epimera magna; illum medio canaliculatum: petiolus brevissimus: *maris* abdomen ovatum, convexum; segmentum 1<sup>um</sup>. maximum, abdominis dimidio vix brevius; 2<sup>um</sup>. mediocre; sequentia parva; subtus abdomen segmenta 6 ventralia conspicua, quorum 1<sup>um</sup>. et 2<sup>um</sup>. magna, cætera parva: *fem.* abdomen elongato-ovatum, subtus carinatum; segmenta ventralia occulta: propedes mediocres; femora subincrassata; tibiæ apice spina elongata valida arcuata armatæ: mesopedes paullò tenuiores; spina tibialis multo brevior et gracilior: metapedes coxis femoribusque maximis; hæ subtus dentibus 12 minutis armata; tibiæ arcuatæ, subtus canaliculatæ, apice intùs productæ, acuminatæ et spina armatæ: alæ *Chalcidis*.

Sp. 1. Hal. pusilla. Mas et Fem. *Nigra, femoribus apice flavis, tarsis fulvis, alis subfuscis.*

Chalcis pusilla. . *Fabr. Mant. Ins. I. 272. 5. Ent. Syst. II. 197. 8. Syst. Piezat. 167. 29. Gmel. Syst. Nat. I. 5. 2743. 6. Hübn. Naturf. 24. 57. 21. Tab. 2. fig. 25. Ross. Faun. Etrusc. II. 59. 807. Oliv. Encycl. Méthod. V. 439. 8.*

Halticella pusilla. *Spin. Ann. Mus. Hist. Nat. Tom. XVII.*

<sup>f</sup> ἄλτικὸς saltator, κέλλω celeriter moveo. It is usually spelt *Haltichella*.

Nigra, punctata, pilis canis vestita : oculi fuscii : ocelli rufo-fuscii : mesothoracis scutellum inerme ; squamulæ flavæ : abdomen nitidum, glabrum, basi nudum : pedes nigri ; pro- et mesofemora apice fulva ; metafemora apice flava ; pro- et mesotibiæ fuscæ, basi, apice et subtus fulvæ ; metatibiæ apice et macula basim versus fulvæ ; tarsi fulvi ; ungues et pulvilli fuscii : alæ subfuscæ, medio obscuriores : nervi fuscii. (Corp. long.  $1\frac{1}{4}$ — $1\frac{3}{4}$  lin. ; alar.  $2\frac{1}{4}$ — $2\frac{3}{4}$  lin.)

Taken near Paris by M. F. de Laporte.

GENUS V. HOCKERIA,<sup>g</sup> *De Laporte.*

Chalcis . . *Fabricius, Gmelin, Olivier, Latreille.*

Halticella. *Spinola, Olivier, &c.*

Hockeria. *De Laporte.*

Caput *Halticellæ* : antennæ 13-articulatæ, prope os insertæ ; *maris* subfusiformes, corporis dimidio longiores ; *fem.* subclavatæ, paulò breviores ; articulus 1<sup>us</sup>. flagelli dimidii longitudinem ; 2<sup>us</sup>. cyathiformis ; 3<sup>us</sup>. et 8-sequentes subæquales ; 12<sup>us</sup>. et 13<sup>us</sup>. minimi, vix conspicui : os *Halticellæ* : thorax ovatus : pectus parvum : prothoracis scutellum magnum, quadratum : mesothoracis scutum magnum ; parapsides benè determinatæ ; scutellum magnum, subrotundum ; paraptera et epimera mediocria : metathoracis scutellum maximum, medio canaliculatum : *maris* abdomen sessile, ovatum, convexum ; segmentum 1<sup>um</sup>. magnum ; sequentia parva, apicem versus longitudine decrescentia ; subtus abdomen segmenta 7 ventralia conspicua, basalia apicalibus longiora : *fem.* abdomen elongato-ovatum, subtus carinatum ; segmentum 1<sup>um</sup>. maximum, abdominis dimidio paulò brevius ; 2<sup>um</sup>. mediocre ; 3<sup>um</sup>. 4<sup>um</sup>. et 5<sup>um</sup>. parva ; 6<sup>um</sup>. latius ; segmenta ventralia vix conspicua : propedes mediocres ; tibiæ apice spina armatæ ; tarsi breves ; ungues et pulvilli minuti : mesopedes paulò tenuiores : metapedes elongati ; coxæ maximæ, trigonæ ; femora magna, ovata, subtus apice dentibus 2 magnis obtusis armata ; tibiæ arcuatæ, subtus canaliculatæ, apice latiores et spinis 2 armatæ : proalæ nervus ordinarius costæ partem brevissimam occupans ; ramulus stigmatalis minimus, vix furcatus.

This genus forms the second division of *Chalcis*, in Latreille's *Gen. Crust. et Ins. &c.* Spinola placed it with *Chalcis pusilla* in his genus *Halticella*, which was probably formed on the species belonging to it ; but this being uncertain, I have

adopted De Laporte's generic name. The peculiar form and low insertion of the antennæ, and the very short part of the costa occupied by the ordinary nervures of the superior wings, are characters possessed also by the *Encyrtidæ*.

Sp. 1. Hoc. bispinosa. Fem. *Nigra, pro- et mesotibiis tarsisque omnibus rufis, proalis medio fuscis, albo maculatis.*

*Chalcis bispinosa* . . *Fabr. Syst. Piezat.* 166. 28. *Fonscol. Ann. Sci. Nat.* 26. 279. 9.

*Halticella bispinosa.* *Spin. Ann. Mus. Hist. Nat.* Tom. XVII. *Oliv. Nouv. Dict. d'Hist. Nat.*

*Nigra, nitida, punctata, vix pilosa: oculi fusci: ocelli rufo-fusci: mesothoracis scutellum apice bispinosum; squamulæ rufo-fuscæ: abdomen nitidissimum, glabrum, acuminatum, subtus rufo-fuscum; pedes nigri; pro- et mesotibiæ omnino, et metatibiæ apice rufæ: tarsi rufi; ungues et pulvilli fusci: alæ subfuscæ; proalæ medio fuscæ, albo bimaculatæ; nervi fusci. (Corp. long. 2 lin.; alar. 2 $\frac{3}{4}$  lin.)*

Taken near Paris, by M. F. de Laporte.

Sp. 2. Hoc. bifasciata. Fem. *Nigra, tarsis rufis, proalis fusco bifasciatis.*

*Chalcis bimaculata.* *Fonscol. Ann. Sci. Nat.* XXVI. 280. 11.

*Nigra, obscura, punctata, pilosa: oculi fusci: ocelli rufo-fusci: antennæ nigræ, graciles, thorace longiores: mesothoracis scutellum inerme; squamulæ nigræ: abdomen *H. bispinosæ* sed brevius, nitidum, glabrum, basi nudum, subtus rufo-fuscum: pedes nigri; femora postica subtus fusca; coxæ, tibiæ apice tarsique rufescentes; ungues et pulvilli fusci: alæ subfuscæ; proalarum fasciæ medio connectæ: nervi fusci. (Corp. long. 1—1 $\frac{1}{2}$  lin.; alar. 2—2 $\frac{1}{4}$  lin.)*

Taken near Paris, by M. F. de Laporte.

Sp. 3. Hoc. hetera. Mas. *Nigra, pedibus rufis, meta-femoribus et tibiis nigris, mesothoracis scutello integro.*

*Nigra, nitida, punctata, pilosa: oculi fusci: ocelli rufo-fusci: antennæ nigræ, gracillimæ, corporis dimidio longiores; scapus perlongus: mesothoracis scutellum inerme; squamulæ rufo-*

fuscæ: metathoracis scutellum maximum, apice utrinque productum: abdomen nitidum, glabrum, subtus apice rufo-fuscum: pedes rufi; coxæ nigræ; trochanteres fusci; pro- et mesofemora basi nigra; metafemora nigra, apice supra rufa; metatibiæ nigræ, apice rufæ; tarsi et ungues fusci: alæ subfuscæ; proalæ medio obscuriores; nervi fusci. (Corp. long.  $1\frac{1}{4}$  lin.; alar.  $2\frac{1}{4}$  lin.)

Taken near Paris, by M. F. de Laporte.

Sp. 4. Hoc. nigra. Mas. *Nigra, metafemoribus tarsisque omnibus rufis.*

Chalcis Dargelasi? *Latr. Hist. Nat. des Crust. &c. XIII. 221.*

Nigra, obscura, punctata, pilosa: oculi fusci: ocelli rufo-fusci: mandibulæ rufæ: antennæ nigræ, thoraci breviores: mesothoracis scutellum inerme; squamulæ nigro-fuscæ: metathoracis scutellum maximum: abdomen nitidum, glabrum: pedes nigri; metafemora rufa, basi extûs, nonnunquam quoque supra et subtus nigra; tarsi rufi; ungues et pulvilli fusci: alæ hyalinæ; nervi pallidè fusci. (Corp. long.  $1\frac{3}{4}$ —2 lin.; alar.  $2\frac{1}{2}$ — $2\frac{3}{4}$  lin.)

Taken near Paris, by M. F. de Laporte.

Sp. 5. Hoc. nigripes. Mas. *Nigra, tarsis rufis, mesothoracis scutello integro.*

Chalcis nigripes. *Fonscol. Ann. Sci. Nat. XXVI. 280. 10.*

Nigra, obscura, punctata, pubescens: oculi fusci: ocelli rufo-fusci: antennæ nigræ: mesothoracis scutellum convexum, integrum; squamulæ nigræ: metathoracis scutellum maximum, striatum: abdomen nitidum, glabrum, basi nudum: pedes nigri; metacoxæ nitidissimæ; trochanteres, ungues et pulvilli fusci: tibiæ apice rufæ: tarsi rufi: alæ subhyalinæ; nervi fusci, basi pallidiores. (Corp. long.  $1\frac{1}{2}$  lin.; alar.  $2\frac{1}{4}$  lin.)

Taken near Paris, by M. F. de Laporte.

Sp. 6. Hoc. rufipes. Mas. *Nigra, pedibus rufis, metafemoribus et tibiis nigris, mesothoracis scutello bispinoso.*

Chalcis rufipes . *Oliv. Encycl. Méthod. V. 440. 11.*

Chalcis clavipes? *Rossi.*

Chalcis armata . *Dalm. Kongl. Vetens. Acad. Handl. für är. 1820. Var.?*

Cynips armata. . *Panz. Faun. Insect. Germ. 74. 9. Var.?*



Nigra, obscura, punctata, pilosa: oculi fuscii: ocelli rufo-fuscii: antennæ nigrae, graciles, corporis dimidio longiores: mesothoracis scutellum elevatum, apice spinis duabus longis obtusis armatum; squamulae nigro-fuscae: abdomen nitidum, glabrum, ferè nudum: pedes rufi; coxæ nigrae; trochanteres fuscii; pro- et mesofemora fusco cingulata; metafemora nigra; metatibiae nigrae, apice rufae; tarsi et ungues fuscii: alae subfuscae; proalae medio obscuriores, macula prope stigma hyalina: nervi fuscii. (Corp. long. 1—2 lin.; alar. 2—2 $\frac{3}{4}$  lin.)

Var.  $\beta$ . Pro- et mesotibiae fusco cingulatae.

Taken near Paris, by M. F. de Laporte; also in England, by Mr. Curtis. Var.  $\beta$  is described from an English specimen.

Sp. 7. Hoc. unicolor. Mas. *Nigra, pedibus omnino nigris, alis hyalinis.*

Nigra, obscura, punctata, pilosa: oculi fuscii: ocelli rufo-fuscii: antennæ nigrae, corporis dimidii longitudinem: mesothoracis scutellum elevatum, apice spinis duabus brevissimis armatum; squamulae nigrae: abdomen nitidum, glabrum, ferè nudum: pedes nigri: alae hyalinae; nervi fuscii. (Corp. long. 1 lin.; alar. 1 $\frac{3}{4}$  lin.)

July; South of France.

## GENUS VI. NOTASPIS,<sup>h</sup> Walker.

Mas.—Caput magnum, transversum, thorace latius, anticè ubi insident scapi excavatum: oculi magni, prominentes, globosi: antennæ 13-articulatae, subclavatae, apice acuminatae, prope os insertae, corporis dimidio breviores; articulus 1<sup>us</sup>. antennae triente longior; 2<sup>us</sup>. mediocris; 3<sup>us</sup>. minimus; 4<sup>us</sup>. et 6 sequentes mediocres, subaequales; clava conica, articulis 9<sup>o</sup>. et 10<sup>o</sup>. longior: thorax ovatus: pectus parvum: prothoracis scutellum mediocre, subquadratum: mesothoracis scutum mediocre; parapsides benè determinatae, magnae, convexae; squamulae maximae, globosae; paraptera magna; scutellum maximum, metathoracem abdominisque basim transiens, apice acuminatum: metathorax parvus: abdomen sessile, ovatum, convexum; segmentum 1<sup>um</sup>. maximum; caetera minima: pro- et mesopedes mediocres, femora subclavata, tarsi graciles; metapedes magni, coxæ trigonae, femora ovata, tibiae subtus canaliculatae, tarsi crassi brevesque: alae *Hockeriae*.

<sup>h</sup> νῶτος dorsum, ἀσπίς clypeus.

Sp. 1. Not. formiciformis. Mas. *Æneus*, *antennis fuscis*,  
*tarsis fulvis*, *alis albis*.

*Ænea*, obscura, punctata, haud pubescens: oculi fuscii: ocelli rufo-fuscii: antennæ fuscae; articulus 1<sup>us</sup>. æneus: thorax punctis magnis profundèque excavatis scaber; latera ferè glabra; squamulæ rufo-fuscae, nitidæ; mesothoracis scutellum elevatum, subtus apicem unidentatum: abdomen nitidum, glabrum: pedes nigro-ænei; trochanteres fuscii; tibiæ apice fulvæ; tarsi fulvi; ungues et pulvilli fuscii: alæ albi, iridescentes; nervi pallidi, vix conspicui. (Corp. long.  $\frac{4}{5}$  lin.; alar.  $1\frac{1}{4}$  lin.)

Taken in St. Vincent's island, by the Rev. Lansdown Guilding.

GENUS VII. DIRHINUS, *Dalman*.

Chalcis. *Jurine*, *Latreille*, *Spinola*.

*Mas.*—Caput magnum, thorace non angustius, multò longius quàm latum, anticè inter oculos tuberculis duobus armatum, posticè sub prothorace productum; tubercula lata, obtusa, apice serrata: oculi mediocres, globosi: antennæ 13-articulatæ, subclavatæ, per longum striatæ; articulus 1<sup>us</sup>. elongatus; sequentes mediocres; ultimus minimus, vix conspicuus: mandibulæ arcuatæ; una bidentata; altera tridentata: thorax elongato-ovatus: pectus parvum: prothoracis scutellum magnum, subquadratum: mesothoracis scutum angustum; parapsides benè determinatæ; scutellum mediocre: metathorax magnus: abdomen ovatum, petiolatum, supra planum, subtus carinatum, apice retusum: segmenta dorsalia subtus abdomen marginem formantia; 1<sup>um</sup>. s. petiolus crassum; 2<sup>um</sup>. maximum; cætera minima: segmenta nonnulla ventralia conspicua: tibiæ apice spina armatæ: pro- et mesofemora clavata: metapedes magni; coxæ elongatæ; femora ovata, subtus serrata; tibiæ arcuatæ, subtus canaliculatæ; tarsi graciles: proalæ angustæ; nervus ordinarius costam longum occupans; ramulus stigmatalis vix ullus.

This genus is allied to *Cerocephala*, *Spalangia*, &c.

Sp. 1. Dir. cornigerus. Mas. *Ater*, *genubus tarsisque rufis*, *alis hyalinis*.

Chalcis cornigera. *Jur. Nouv. Méthod. Hyménopt.* 315. Pl. 13. 47. *Spin. Ins. Lig. Fascic.* 3<sup>us</sup>. 164. 8.

Nigra, obscura, punctata, pubescens: oculi fusci: ocelli rufo-fusci: antennæ nigræ: caput scabrum: thorax lævior: squamulæ rufo-fuscæ: metathorax carinatus, utrinque spinosus: abdomen nitidum, glabrum, basi striatum: pedes nigri; trochanteres fusci; pro- et mesofemora apice rufa; metafemora basi unidentata; pro- et mesotibiæ basi apiceque rufæ; tarsi rufi; ungues et pulvilli fusci: alæ hyalinæ; proalæ ad costam fuscæ; nervi fusci. (Corp. long. 2 lin.; alar.  $2\frac{1}{4}$  lin.)

Taken near Paris, by M. F. de Laporte.

ART. III.—*Capture of Insects at Burghfield.*—By the Rev. C. S. BIRD, M. A. F.L.S.

*Burghfield Hill House, near Reading, Aug. 1833.*

SIR,—Having resided at this place about ten years, and employed my leisure hours in making an Entomological Collection, I think I have ascertained pretty nearly what this locality affords, amongst the more conspicuous insects at least; and, with your permission, I shall be happy to register, in your Magazine, the result of my researches. The country around me is woody, particularly abounding in elms, and my house is close to several copses, containing large, though not old, oaks, &c.; and at the distance of half a mile I have the range of a heathy common, terminating in fir-groves. There is no chalk, that I am aware of, within six miles.

I am particularly attached to *Lepidoptera*,—probably only because I have been most successful in this order. This success I owe to the use of a lamp to attract moths. During the moonless nights of summer, I sit with a Sinumbra-lamp, and perhaps one or two smaller lamps, placed on a table, close to the window. The moths speedily enter the room, if the weather be warm. I have had a levee of more than a hundred between the hours of ten and twelve. In the spring, too, and autumn, I have been frequently fortunate, though generally having my patience sufficiently tried. In March, for instance, I have taken many specimens of *Biston prodromarius* in one evening; *Glæa rubricosa*, and *Lytæa leucographa*, have accompanied them. In April and May, *Cucullia fissina*, and *Peridæa serrata*, have visited me. When November has arrived,